Knowledge Check

Java Interview Preparation

What is the default value of a boolean variable?

a) true
b) false
c) 0
d) 1

Which keyword is used to prevent inheritance of a class?

a) static
b) final
c) abstract
d) volatile

What is the size of a char in Java?

a) 8 bits
b) 16 bits
c) 32 bits
d) 64 bits

Which method must be implemented by all threads?

a) start()
b) stop()
c) run()
d) main()

What does the 'static' keyword mean in a method declaration?

A) The method is abstract
B) The method cannot be overridden
C) The method belongs to the class, not an instance
D) The method is synchronized

Which of the following is not a valid keyword in Java?

A) double
B) switch
C) then
D) instanceof

What will be the output of the following code?

int x = 5;

System.out.println(x++);

A) 4
B) 5
C) 6
D) Compilation error

Which of the following is a marker interface?

A) Runnable
B) Serializable
C) Comparable
D) Comparator

Which of the following is not a valid constructor for class MyClass?

A) MyClass()
B) MyClass(int a)
C) MyClass(int a, int b)
D) int MyClass()

What is the default value of an instance variable of type Object?

A) null
B) 0
C) "null"
D) false

What is the return type of the hashCode() method in the Object class?

A) Object
B) int
C) void
D) long

Which package contains the Random class?

A) java.util
B) java.lang
C) java.io
D) java.math

Which of the following is the correct syntax for a generic class?

A) class MyClass<T> {}
B) class<T> MyClass {}
C) <T> class MyClass {}
D) MyClass<T> class {}

Which of the following is true for a final variable?

A) It can be changed once initialized
B) It can be assigned multiple times
C) It must be initialized when declared
D) It cannot be initialized at declaration

Which of the following is the correct syntax for a generic class?

A) class MyClass<T> {}
B) class<T> MyClass {}
C) <T> class MyClass {}
D) MyClass<T> class {}

Which collection class allows you to grow or shrink its size and provides indexed access to its elements but is not synchronized?

A) java.util.HashSet
B) java.util.LinkedList
C) java.util.ArrayList
D) java.util.TreeSet

Which method is used to schedule a thread for execution?

A) run()
B) start()
C) yield()
D) join()

Which of the following exception is thrown when a thread is waiting, sleeping, or doing some processing and it is interrupted?

A) InterruptedException
B) IOException
C) NullPointerException
D) ArithmeticException

What is the parent class of all classes in Java?

    A) java.lang.Class
    B) java.lang.String
    C) java.lang.Object
    D) java.lang.System

Which of the following is not an access modifier in Java?

    A) protected
    B) public
    C) private
    D) package

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B) public
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Which of the following statements is incorrect about packages?

A) Packages help in avoiding name conflicts
B) Packages help in organizing classes
C) Packages cannot be nested
D) Packages provide access protection

Which of the following is not a feature of the Java programming language?

A) Platform-independent
B) Robust
C) Event-driven
D) Secure

What is the output of the following code?

```java
public class Test {
    public static void main(String[] args) {
        String s1 = "abc";
        String s2 = "abc";
        System.out.println(s1 == s2);
    }
}
```

A) false
B) true
C) Compilation error
D) Runtime error

Which of the following statements is true about the main method in Java?

A) It must return an int value
B) It is always static
C) It can have any access modifier
D) It must be void

Which of the following methods is used to compare two strings in Java?

A) equals()
B) compareTo()
C) == operator
D) All of the above

Which of the following is used to perform cleanup processing before an object is garbage collected?

   A) finalize()
   B) finally()
   C) final()
   D) none of the above

Which of the following statements is true about Java arrays?

   A) Arrays can only hold primitive types
   B) Arrays are dynamically sized
   C) Arrays can hold objects
   D) The size of arrays must be specified at runtime

Which interface does java.util.Hashtable implement?

    A) Map
    B) Set
    C) List
    D) Collection

Which method is used to stop a thread from running?

    A) stop()
    B) exit()
    C) terminate()
    D) end()

Which keyword is used for accessing the features of a package?

    A) import
    B) package
    C) using
    D) include

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